

Revised 12/2/97

## **CALFED Water Transfer Element**

### **Draft Discussion Paper No. 6 - Reservoir Refill Criteria**

#### Issue

What rules or criteria on reservoir refill should apply to transfers of water from reservoir storage?

#### Background

As operators of downstream projects, DWR and USBR may be injured by a transfer of water from upstream reservoir storage if the vacated storage space is refilled when the Delta is in balanced conditions. Injury will occur if the water required to refill the vacated storage space would otherwise be available to meet Delta outflow or water quality requirements, and in its absence the burden on the projects is increased as a direct result of the transfer.

Upstream reservoir operators have argued that reservoir refill criteria are an impairment of their right to the full benefit of their project, including the right to sell water from storage. Since downstream appropriators cannot compel the continued storage of water, logically they should not be able to object to a change in the use of stored water. Furthermore, downstream appropriators cannot complain of injury based on the reservoir operators increased consumptive use of stored water. Since transfers are equally a reasonable and beneficial use of water, the argument is that transfers should not be treated differently from a consumptive use of stored water.

It has also been suggested that reservoir refill criteria as imposed by DWR and USBR may create a benefit to the CVP and SWP as a result of the reservoir operation. (This is strongly disputed by DWR and USBR and the analysis is probably different if projects other than CVP and SWP have obligations to meet water quality objectives in the Delta.)

#### Discussion

Refill criteria can be a deterrent to transfers. They create a risk that the reservoir operator will have to bypass flows which would otherwise be available for storage; this creates risk for the future water supply and power generation capacity of the reservoir operator.

Reservoir refill criteria have historically been imposed on short term (one year) transfers of water from reservoir storage if the transfer required use of CVP or SWP facilities for conveyance. DWR and USBR have imposed refill requirements as a condition of the use of SWP or CVP facilities or as a condition for satisfaction of a protest to a petition for a temporary change in place of use.

Transfer proponents have generally not challenged the refill requirements due to the urgency of obtaining the temporary change permit from the State Board, but some stakeholders question whether DWR and USBR have a basis in California law for these requirements. Project operators believe that refill criteria are necessary to exercise the protection of the "no injury" rule.

Presumably similar criteria would apply to a long term transfer. Stakeholders are concerned about the uncertainty on future water supplies created by having to bypass flows which could otherwise be used to refill the vacated reservoir storage space.

The project operators are concerned that, without refill criteria, vacated storage space will be filled with water which would otherwise be available to the project. In the absence of the transfer, there would be more water in the system in the subsequent year to meet project obligations (contract deliveries, Delta outflow or water quality requirements). The transfer might also cause the reservoir refill to be delayed, with a possible impact on conditions in the Delta. Theoretically, the Delta could go into balanced conditions earlier in the year as a result of refilling vacated reservoir storage space created by a prior year transfer. The result would be that the CVP and SWP would have to begin making storage releases or reducing exports earlier than otherwise.

### Solution Options

A possible resolution is to calculate the probability of reservoir refill impact for a transfer from a particular reservoir based upon the hydrologic record. That probability could then be converted into a percentage reduction in the storage release which is transferable. For example, if there is a 5% probability that the transfer of stored water from a particular reservoir will impact the Delta, and there will be a 20% carriage water requirement across the Delta, the transferable portion of the storage release would be 75%.

The risk to the seller created by reservoir refill criteria could be shared with the buyer. For example, if the seller has less water available in the year subsequent to the transfer, the transfer agreement could provide that the buyer reimburse the seller for that cost.

This issue may be resolved through the State Board's water rights proceeding to allocate responsibility for implementation of

the Water Quality Control Plan. If the State Board decides to extend responsibility for Delta water quality and outflow obligations to water users other than CVP and SWP, the refill criteria may no longer be an issue.